

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



Rec'd PCT/PTO 19 MAY 2005



(43) International Publication Date
10 June 2004 (10.06.2004)

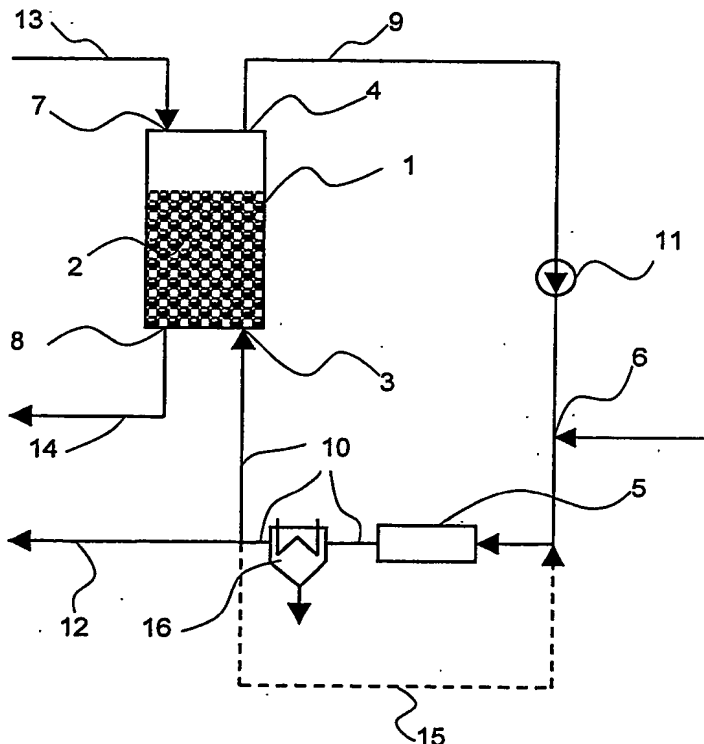
PCT

(10) International Publication Number
WO 2004/047959 A1

- (51) International Patent Classification⁷: B01D 53/86, C08F 6/00
- (21) International Application Number: PCT/EP2003/013123
- (22) International Filing Date: 21 November 2003 (21.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
102 54 807.2 22 November 2002 (22.11.2002) DE
60/435,196 20 December 2002 (20.12.2002) US
- (72) Inventors; and
(75) Inventors/Applicants (for US only): MÄHLING, Frank-Olaf [DE/DE]; Max-Joseph-Strasse 23, 68167 Mannheim (DE). NEUMANN, Erich [DE/DE]; Er-lenkamp 7, 38126 Braunschweig (DE). FINETTE, Andre-Armand [DE/DE]; Richard Wagner Str. 24, 53115 Bonn (DE). NIEKEN, Ulrich [DE/DE]; Akazienweg 7, 67434 Neustadt a.d.W (DE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
- (71) Applicant (for all designated States except US): BASELL POLYOLEFINE GMBH [DE/DE]; Brühler Strasse 60, 50389 Wesseling (DE).

[Continued on next page]

(54) Title: SAFE REMOVAL OF VOLATILE, OXIDIZABLE COMPOUNDS FROM PARTICLES, IN PARTICULAR POLYMER PARTICLES



(57) **Abstract:** In a method of removing volatile oxidizable compounds from particles present in a container, a gas stream is continuously introduced into the container, the gas stream takes up the oxidizable compound from the particles in the container and a gas stream laden with the oxidizable compound is discharged from the container. In the method of the present invention, oxygen is added to the gas stream which has been discharged and the oxidizable compound present in the discharged gas stream is subsequently at least partly catalytically oxidized by means of the oxygen and this oxidized gas stream forms at least part of the gas stream introduced, so that the gas stream is circulated. This makes safe and inexpensive removal of the oxidizable compounds from the particles possible.



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.